

## CLAIMS

1. A magnetic sensor comprising:

a pair of magnetic detecting elements connected in series with each other, one of which serves as a sensing  
5 portion made to face a magnetic detecting medium, and the other serves as a temperature-compensating portion that is not affected by magnetism of said magnetic detecting medium;

a magnet that gives magnetic biases to said pair of  
10 magnetic detecting elements; and

a detection circuit that applies DC voltage to between both ends of said pair of serially-connected magnetic detecting elements and detects a potential change of a common connection point of said magnetic detecting elements.

15 2. A magnetic sensor comprising:

first and second fixed resistors connected in parallel with an output line of DC power source;

a first magnetic detecting element connected in series with said first fixed resistor to function as a sensing  
20 portion made to face a magnetic detecting medium;

a second magnetic detecting element connected in series with said second fixed resistor to function as a temperature-compensating portion that is not affected by magnetism of said magnetic detecting medium;

25 a magnet that gives magnetic biases to said first and second magnetic detecting elements; and

a detection circuit that detects a potential change between a connection point of said first fixed resistor and said first magnetic detecting element and that of said  
30 second fixed resistor and said second magnetic detecting element.